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INCREMENTAL STEP DRILLING SYSTEM AND METHOD Weber et al.

Appl. No.: 10/041,767 Atty Docket: EXCLN.098A

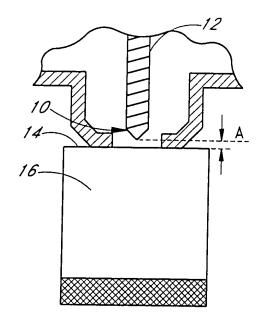


FIG. 1A

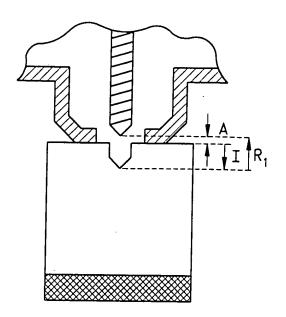


FIG. 1B

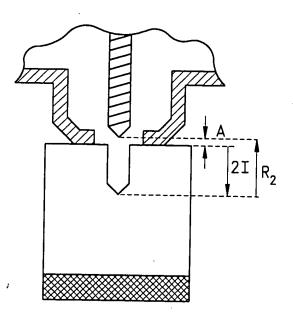


FIG. 1C (PRIOR ART)

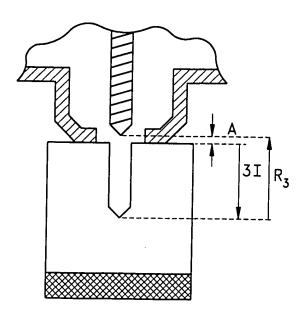
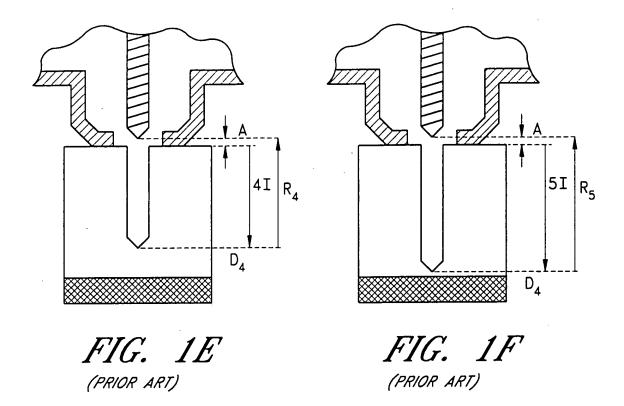
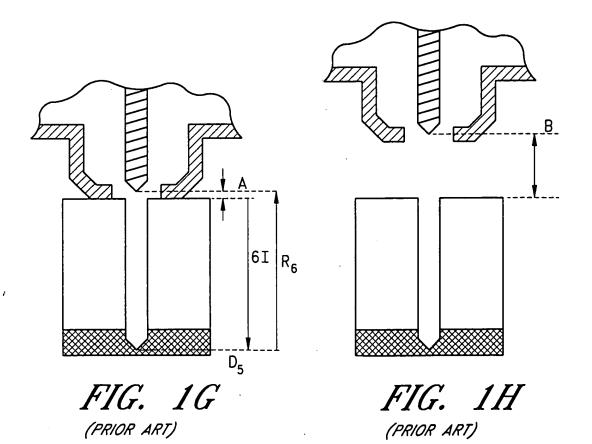


FIG. 1D (PRIOR ART)

Appl. No.: 10/041,767 Atty Docket: EXCLN.098A





Appl. No.: 10/041,767 Atty Docket: EXCLN.098A

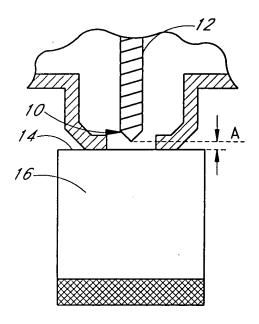


FIG. 2A

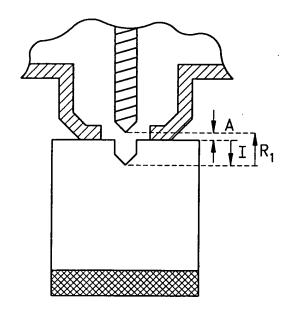


FIG. 2B

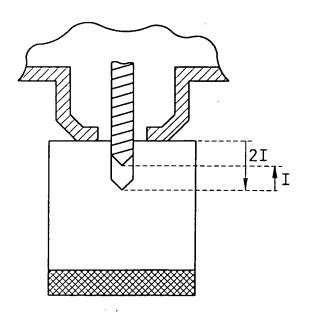


FIG. 2C

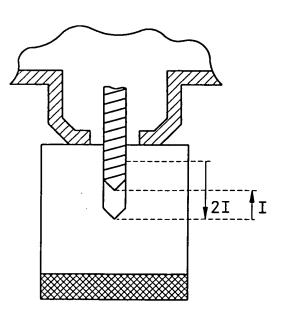
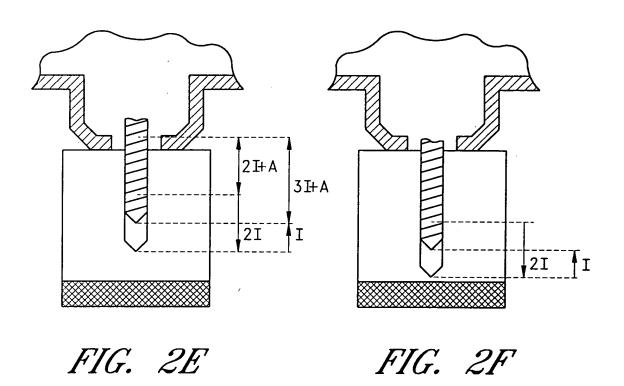
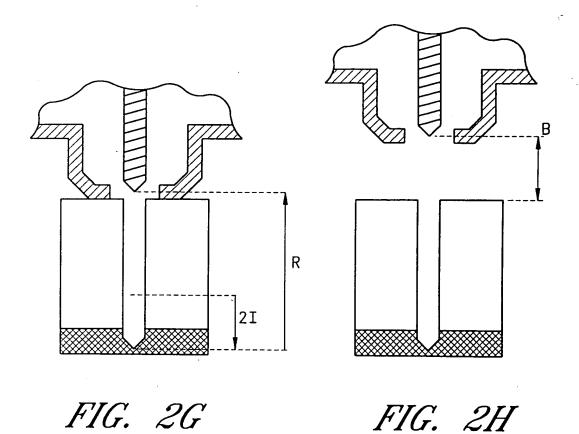


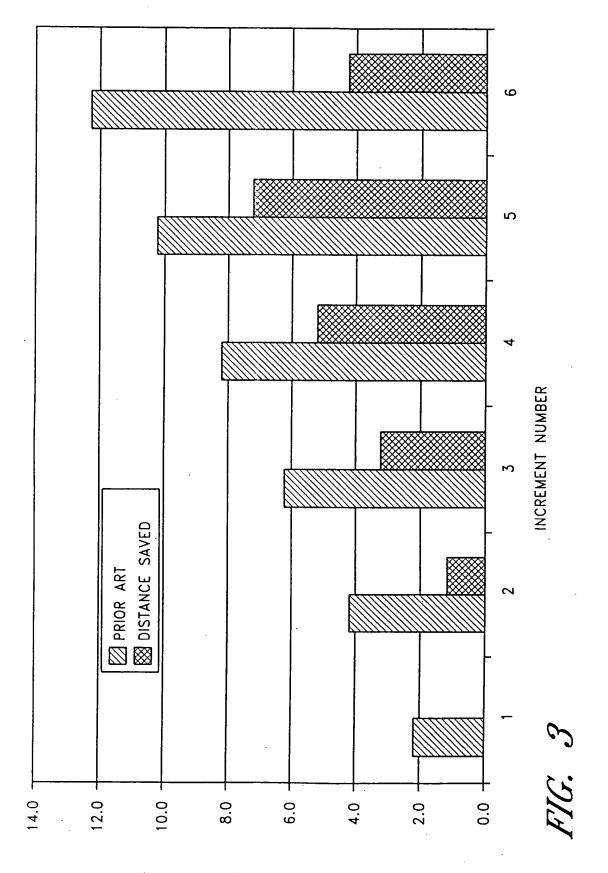
FIG. 2D

Appl. No.: 10/041,767 Atty Docket: EXCLN.098A



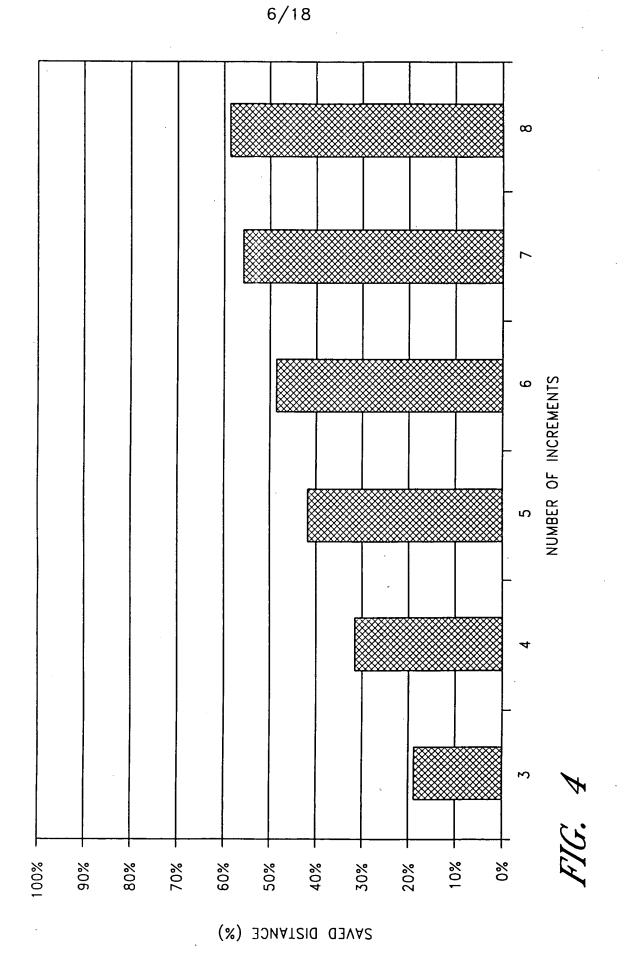


Appl. No.: 10/041.767 Atty Docket: EXCLN.098A



DISTANCE TRAVELED (INCREMENTS)

INCREMENTAL STEP DRILLING SYSTEM AND METHOD Weber et al. Appl. No.: 10/041.767 Atty Docket: EXCLN.098A



Appl. No.: 10/041,767 Atty Docket: EXCLN.098A

7/18

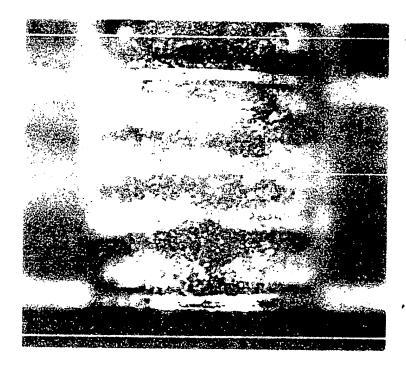


FIG. 5A (PRIOR ART)

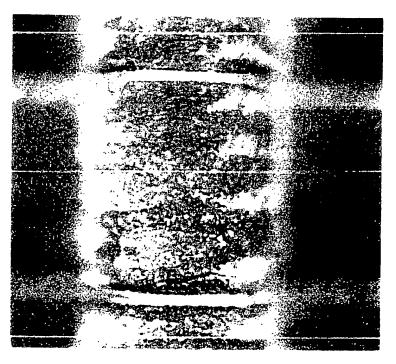


FIG. 5B

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Appl. No.: 10/041,767 Atty Docket: EXCLN.098A

8/18

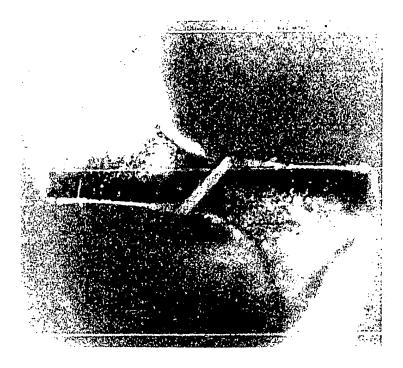


FIG. 6A (PRIOR ART)

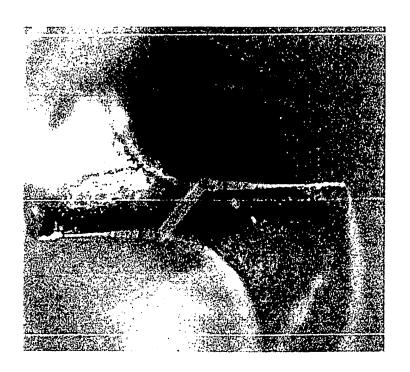
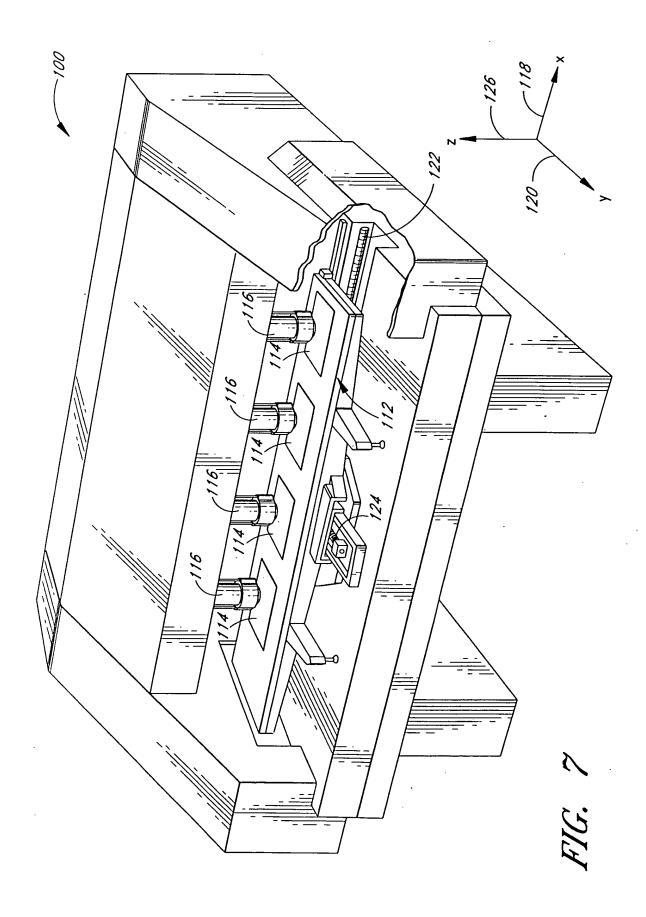


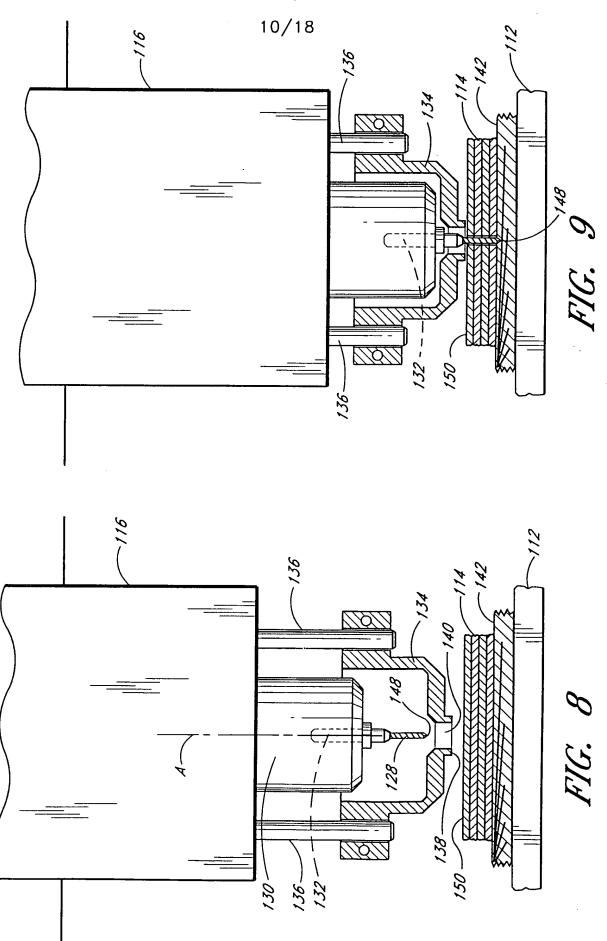
FIG. 6B

BEST AVAILABLE COPY

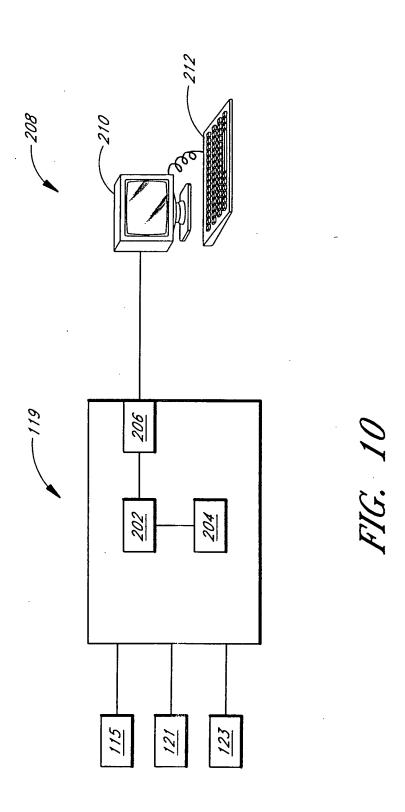
Appl. No.: 10/041.767 Atty Docket: EXCLN.098A



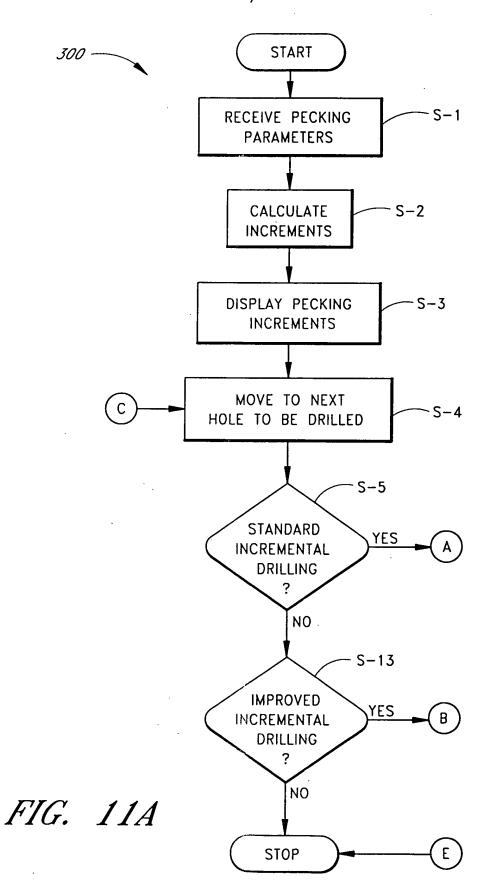
Appl. No.: 10/041.767 Atty Docket: EXCLN.098A



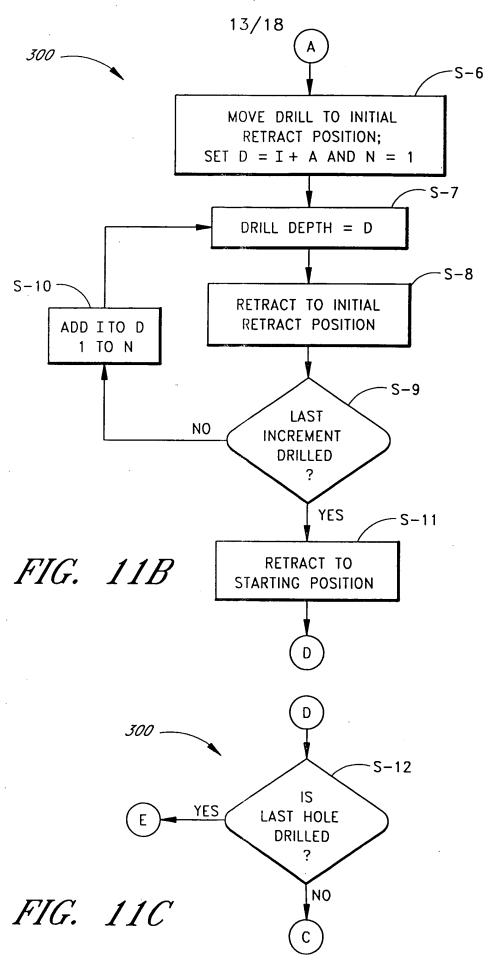
Appl. No.: 10/041.767 Atty Docket: EXCLN.098A



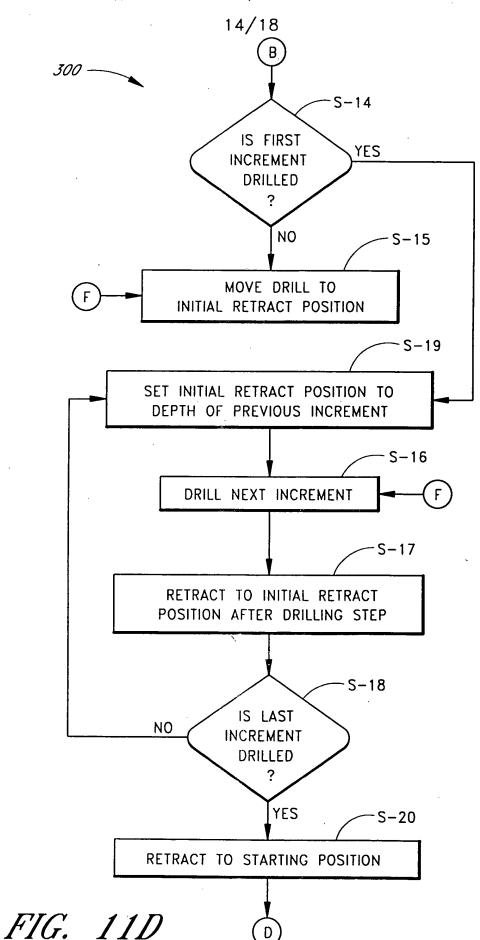
Appl. No.: 10/041,767 Atty Docket: EXCLN.098A



Appl. No.: 10/041,767 Atty Docket: EXCLN.098A



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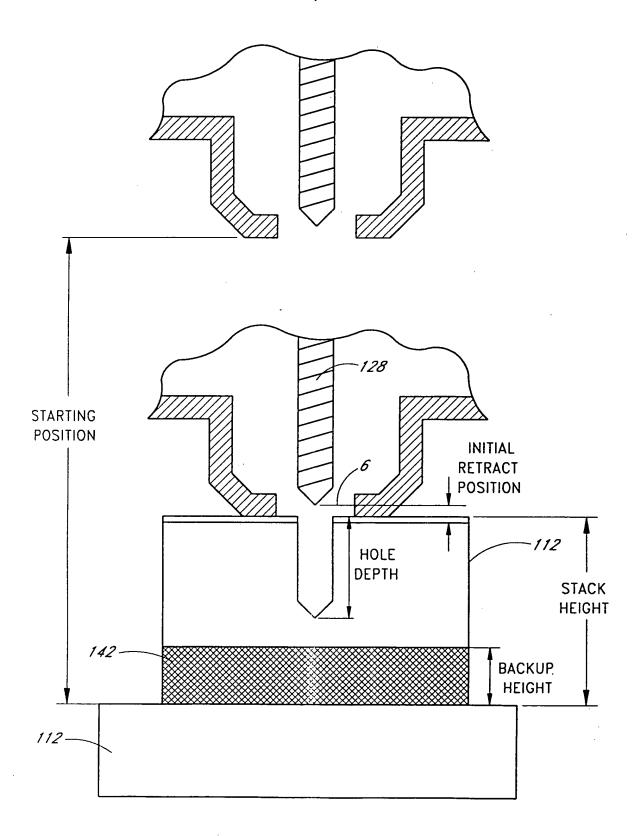


FIG. 12

INCREMENTAL STEP DRILLING SYSTEM AND METHOD Weber et al. Appl. No.: 10/041.767 Atty Docket: EXCLN.098A

3200	GE	/ 590.	JFS .0000 STROKE	FINAL DEPTH .063 .005	3220 3240
	PECK DRILLING SETUP PAGE	2nd UP LOWER LIMIT	T B(3160
	S SETI	R 2nd	LIMI	.015	
	SILLING	F UPPE	S	.300	3140/
	CK DF	NO. 0F		8	3120
	PE(STACK	HEIGHT	.2640	3100
	· .	PECK	TOOLS	01	
		PECKING	STATUS	Z 0	3060
				3040 —	1.34

	80								980'-
X	_							089	078
PER PE	9						089	076	067
INCREMENTAL HOLE DEPTH PE FROM THE TOP OF THE STACK	2					089	074	064	056
NTAL HO	4				089	071	059	051	045
SHOWS THE INCREMENTAL HOLE DEPTH PER PECK FROM THE TOP OF THE STACK	3			089	067	053	045	038	033
IOWS THE	2		089	059	045	036	030	025	022
-S	-	089	045	030	022	018	015	013	011
PECK	DEPIH	-	2	3	4	5	9	7	80

Appl. No.: 10/041.767 Atty Docket: EXCLN.098A

17/18

				·)	3026 —	1		3180	80	3200
			PE(X DR	PECK DRILLING SETUP PAGE	SET	.UP	PAGE		
	PECKING PECK	PECK	STACK	NO. O		2 2nd	- dn	LOWER LIMIT	103	MINIM
	STATUS	TOOLS	HEIGHT	PECKS	LIMIT		LIMIT	BOFS	,375	STROKE
3040 —	NO /	01	.7140	∞ ⁻	.800	0	25	025 FINAL DEPTH	.478	.010
•	3060		3100	3120	3140		3160	3220		3240
D										

PECK	SF	SHOWS THE INCREMENTAL HOLE DEPTH PER PECK FROM THE TOP OF THE STACK	INCREME FROM THE	INCREMENTAL HOLE DEPTH PE FROM THE TOP OF THE STACK	LE DEPTH	PER PEC CK	X	
טברוח	-	2	3	4	က	9	7	80
1	257							
2	129	257						
3	086	171	257					
4	064	129	193	257				
5	051	103	154	206	257			
6	043	086	129	171	214	257		
7	037	073	110	147	184	220	257	
8	032	064	960'-	129	161	193	225	257

FIG. 14B

